



For metal containers

RDL[®] LININGS



Our food compliant Tri-Sure[®] RDL[®] internal linings are the premiere solution for protecting your product against influences from the steel packaging and safeguarding our environment from aggressive products.

Tri-Sure[®]
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The RDL® system

Our World leading Regular Drum Lining "RDL®" system, is a major breakthrough in internal linings, also referred to as "lacquers". The RDL®-system has been developed and refined based on over 50 years of research and is now available worldwide via our international network.

In general there are two main types of RDL® linings:

Epoxy phenolic and pure phenolic linings. The binder is a phenolic resin. Epoxy-phenolic linings are a blend of 70% epoxy and 30% phenolic resins. This blend improves flexibility and results in an optimal balance of mechanical and chemical performance.

Within these two basic types there are also pigmented linings which contain inert pigments, like titanium dioxide or iron oxide. These pigments not only give a typical color, they also improve application characteristics and barrier properties, as well as allowing higher layer thicknesses to be applied.

In today's global marketplace, the need for international standardization is obvious. Our standard range of RDL®-Linings makes a truly global standard possible. This is why we encourage container manufacturers to embrace the universal system: we strongly believe it benefits the entire industrial packaging industry.

Complying with international food regulations

Food contact

The Tri-Sure® internal linings comply with international food regulations covering contact with packaged foodstuffs:

- FDA regulation CFR 21 §175.300 related to resinous and polymeric coatings.
- Commission directive (EC) 1935/2004



In-house Compatibility and testing advice

The RDL®-System covers six standard linings. Three epoxy-phenolic linings, and three linings based on a pure phenolic resin. This standard range covers 90% of normal lined drum needs. For the remaining 10%, Tri-Sure® offers specialized and certified solutions. Our in-house chemists are available to provide tailored compatibility advice based on 50 years of experience and our proprietary compatibility database. They can also test specific formulations and simulate specific conditions in our own laboratory. For further information, please contact your local Tri-Sure® representative.



Standard RDL® Linings

a Truly
Global
Standard

Let us serve you! To select the right lining for your packaging solution;
Please contact your local Tri-Sure® representative.

RDL® 29

This lining is based on a blend of epoxy and phenol resins dissolved in a mixture of organic solvents. The lining is baked at high temperature, which eliminates all solvents and causes a condensation reaction. The result: a highly cross-linked epoxy phenol structure.

Color: Clear

Properties:

- High flexibility
- Suitable as a sanitary lining but also to pack a broad range of chemicals
- Good resistance against organic solvents
- Reasonable resistance to certain aqueous products



RDL® 06

This lining is based on a blend of epoxy and phenol resins dissolved in a mixture of organic solvents – with a dispersed iron oxide pigment. The lining is baked at high temperature which eliminates all solvents and causes a condensation reaction. The result: a highly cross-linked epoxy phenolic structure, with a finely dispersed inert inorganic pigmentation.

Color: Oxide red

Properties:

- Very high flexibility
- Suitable to pack a broad range of chemicals and food stuff
- Good protection against organic solvents and certain aqueous products



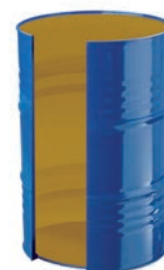
RDL® 44

This lining is based on a blend of epoxy and phenol resins dissolved in a mixture of organic solvents – with dispersed inorganic pigments. The lining is baked at high temperature which eliminates all solvents and causes a condensation reaction. The result: a highly cross-linked epoxy phenol structure, with a finely dispersed inert inorganic pigmentation.

Color: Buff (golden brown)

Properties:

- Very high flexibility
- Suitable to pack a broad range of chemicals and food stuff
- Good protection against organic solvents and certain aqueous products



RDL® 16

This lining is based on a phenol resin dissolved in a mixture of organic solvents. The lining is baked at high temperature which eliminates all solvents and causes a condensation reaction. The result: a highly cross-linked inert phenol structure.

Color: Clear (gold)

Properties:

- Outstanding resistance against organic solvents
- Excellent resistance against high temperatures
- Widely used as a sanitary lining



RDL® 50

This lining is based on a phenol resin dissolved in a mixture of organic solvents with a dispersed titanium dioxide pigment. The lining is baked at high temperature which eliminates all solvents and causes a condensation reaction. The result: a highly cross-linked inert phenolic structure with a finely dispersed inert inorganic pigmentation.

Color: Olive Green

Properties:

- Widely usable for a broad range of chemicals
- Resistance against almost all types of organic solvents
- Excellent resistance against high temperatures



RDL® 39

This lining is based on a phenolic resin dissolved in a mixture of organic solvents with a dispersed iron oxide pigment. The lining is baked at high temperature which eliminates all solvents and causes a condensation reaction. The result: a highly cross-linked inert phenol structure with a finely dispersed inert inorganic pigmentation.

Color: Oxide red

Properties:

- Widely usable for a broad range of chemicals
- Resistance against almost all types of organic solvents
- Excellent resistance against high temperatures



Note : Phenolic linings are not recommended for use with higher pH products – caustic alkalis in particular can cause film damage to phenol resins.



Application

All RDL® linings can be applied to plain and tinplated steel by either spraying or roller coating.

Serious about Sustainability

To lower your oven's energy consumption and carbon footprint the standard lining range is also available in a low-bake version.

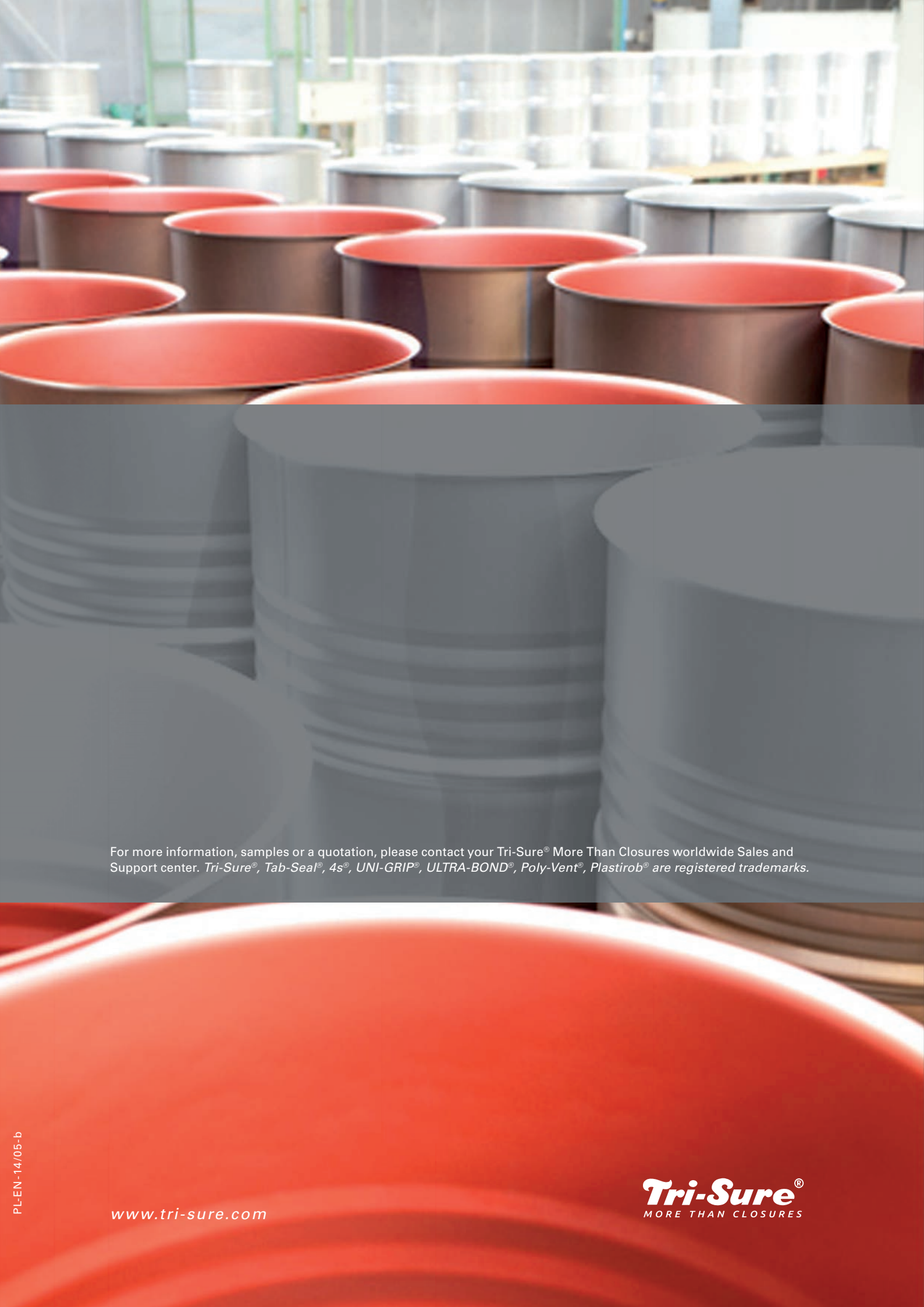


These linings have identical mechanical and chemical properties to the standard cured linings. The low-bake versions also allow you to cure the internal lining and external paint in one combined oven pass, saving even more energy!

The RDL®-System benefits

- ✓ Brings clarity and standardization.
- ✓ Reduces working capital and saves costs.
- ✓ Guarantees consistent quality.
- ✓ Provide sustainable solutions.
- ✓ Worldwide availability.
- ✓ Safeguarding your product and protecting our environment.





For more information, samples or a quotation, please contact your Tri-Sure® More Than Closures worldwide Sales and Support center. *Tri-Sure®*, *Tab-Seal®*, *4s®*, *UNI-GRIP®*, *ULTRA-BOND®*, *Poly-Vent®*, *Plastirob®* are registered trademarks.

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